



Grade 3-5 Field Trips

New York State P-12 Science Learning Standards are listed at the end of each program offering, where applicable

Planetarium Shows

Cosmic Wonders

This live program highlights the seasonal night sky, including constellations, planets, the moon and current astronomical events. Tell us what you are studying! We will emphasize specific topics such as constellation mythology or the solar system.

45 minutes, 60 people maximum (including chaperones), 3-PS2-2, 5-ESS1-1, 5-ESS1-2

Earth's Wild Ride

Explore the Earth as you've never done before -- as observed by a fictional family relocated on the Moon! Discover crashing asteroids, erupting volcanoes, roaring dinosaurs, electrifying lightning and booming thunder. See eclipses, the ice age, Earth's water cycle and the differences between the Earth and Moon on a roller-coaster-like ride through canyons of raging rivers and hot flowing lava. Includes a live segment about the current seasonal sky. *Produced in collaboration with Rice University, through NASA's Immersive Earth Project.*

45 minutes, 60 people maximum (including chaperones), 3-ESS2-2, 4-ESS2-1, 4-ESS2-2, 4-ESS3-2, 5-ESS1-1, 5-ESS1-2

Losing the Dark

Learn all about light pollution and some of the important issues surrounding this problem in our environment. Explore simple actions people can take to help reduce light pollution. Discover ways we can all work together to implement responsible use of lighting. *Produced by Loch Ness Productions.*

45 minutes, 60 people maximum (including chaperones), 3-LS3-2, 4-ESS3-1

Season of Light (Nov. 24, 2017 - Jan. 7, 2018)

Light up the cold, dark winter with a bright holiday show that explores the history of holiday customs, cultural celebrations practiced during the winter solstice, and general astronomy topics like seasons and the winter night sky.

45 minutes, 60 people maximum (including chaperones), 5-ESS1-2

Two Small Pieces of Glass

Explore the history of the telescope from the time of Galileo and discover its impact upon the science of astronomy. Narrated by two children in a star party setting, this new digital show features astrophysicists and cosmologists from the world's renowned universities and observatories explaining astronomy concepts -- from Galileo's act of revealing the cosmos with a simple telescope to the latest discoveries in space, including startling new ideas about life on other planets and dark energy. *Produced by Interstellar Studios.*

45 minutes, 60 people maximum (including chaperones)

We Choose Space!

Discover the completed International Space Station (ISS) and the past and future moon with Astronauts Scott Parazinsky, Tom Jones and Gene Cernan, and veteran space reporter Walter Cronkite. This show is filled with real adventures for everyone who dreams of space and wonder about human spaceflight. *Produced by Loch Ness Productions. Funded by NASA to the Louisiana Art and Science Museum.*

45 minutes, 60 people maximum (including chaperones), 4-ESS3-1, 5-ESS1-1

Planetarium Shows (continued)

Dinosaur Prophecy

Long before dinosaurs' massive extinction 65 million years ago, many individual species simply disappeared. Visit dinosaur graveyards, study their bones, and reconstruct how these creatures lived and died to solve four famous cold cases from the age of the dinosaurs in The Dinosaur Prophecy.

45 minutes, 60 people maximum (including chaperones), 3-LS2-1, 3-LS3-2, 3-LS4-1, 3-LS-4-2, 3-LS-4-3

Hands-on Science Explorations

Amazing Arthropods

Discover the creepy crawling phylum of arthropoda. While observing preserved specimens, discover which characteristics arthropods have in common and which ones differ to create classes such as insects, arachnids, and crustaceans.

45 minutes, 25 students maximum 3-LS1-1, 3-LS3-2, 3-LS4-2

Crime Lab Science

Learn about forensic science and how evolving technology helps scientists, detectives, and other specialists discover the truth about today's criminal cases and mysterious crimes of the past.

45 minutes, 25 students maximum, Measurement & Data 3.MD

Engineering Mission

Design and build a shock-absorbing system that will protect two marshmallow "astronauts" when they land. Test, evaluate, and redesign. This program is adapted from NASA's Design Squad. Trip Tip: Pair with Saturn the Ring World or IBEX: Search for the Edge of the Solar System Planetarium Show.

45 minutes, 25 students maximum 3-PS2-1, 3-PS2-2, 3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3

Erie Canal

Discover the Erie Canal through a hands-on, inquiry-based learning experience that explores the science, technology, and history of innovation in our area. Investigate the Canal's economic importance to New York State and the technological advancements, such as hydraulic cement, that stemmed from its construction. Through experimentation explore Pascal's Law and how it was used to design canal lock systems.

45 minutes, 25 students maximum, 3-PS2-1, 5-ESS3-1

Fun with Physics

Physics is everywhere, even when we play. Through interactive demonstrations, learn how a bicycle tire can turn you into a human gyroscope. Explore the laws of gravity and discover Bernoulli's Principle.

45 minutes, 25 students maximum, 3-PS2-1, 3-PS2-2

Innovation and Invention

Learn what it takes to be an inventor! Explore creative-thinking and the process of inventing through hands-on exploration. Discover real-life stories of amazing creations and look at Schenectady-based innovations and their impact on society.

45 minutes, 25 students maximum, 3-5-ETS1-1, 3-5-ETS1-2, Compliments Common Core Engage NY Grade 5: Module 2B

Just A Phase

Discover answers to the questions of the Moon. Learn why our Moon is so bright, why it controls our tides here on Earth and what is happening to the Moon. Each student will walk their Moon through the phases as they discover what creates new, full, and waxing Moons. Trip Tip: Pair with a Star Lab Portable Planetarium Show.

45 minutes, 25 students maximum, 3-PS2-2, 5-ESS1-2

Hands-on Science Explorations (continued)

Spectacular Spectroscopy

Discover how light travels and creates the colors we see. Mix colored light to see what makes white light. Investigate how prisms can be used to manipulate light and produce rainbows. Experiment with gas samples and learn how they capture and release light waves.

45 minutes, 25 students maximum 4-PS4-1,

Optical Illusions

Trick your eyes with a number of Optical Illusions and then discover scientifically what is happening with your eye and brain for this to occur. Learn about the parts of your eye and how it produces images for your brain to see. See how artists have used techniques to trick us for hundreds of years.

45 minutes, 25 students maximum, 4-PS4-2

Renewable Energy

Use creativity skills to create a creature using everyday materials and littleBits modules.

45 minutes, 25 students maximum, 5-ESS3-1.

Science Solutions

Science can be fun! In this program, students make their own bouncy, stretchy putty while learning about chemistry. Individuals mix different ratios of ingredients to make the best product.

45 minutes, 25 students maximum, MS-PS1-8

Techno Jungle

Energy is everywhere, but what is energy? Where does it come from? Does it run out?

45 minutes, 25 students maximum, 3-3-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3

The Magic of Electricity

We all use it...but what IS it, and how does it work? Learn the basics of electricity through hands-on demonstrations, including the hair-raising Van de Graaf generator. Learn how electricity is generated, delivered to homes, and has changed our lives forever.

45 minutes, 25 students maximum, 4-PS3-4, 3-PS2-3, 3-PS2-3

Interactive Science Demos

Dry Ice

Explore the states of matter and sublimation with the fun and excitement of dry ice.

30 minutes, 30 students maximum, 4-PS3-2, 5-PS1-1, 5-PS1-2, 5-PS1-3

Electricity

What is it? And how do we make more?

30 minutes, 30 students maximum, 3-PS2-3

Nanotechnology

Explore the everyday applications of nanotechnology and find out just how small nano really is.

30 minutes, 30 students maximum

Physics

Find out about the motion and the “why” behind its behavior.

30 minutes, 30 students maximum



Sense and Censability Classes

\$ense and Censability Lesson 1: Money Matters

Students will learn the difference between "needs" and "wants" and how to identify examples of each. Activities will demonstrate how to compare and prioritize needs and wants, and evaluate different choices when making personal and business purchases.

45 minutes, 25 students maximum, Number & Operations in Base Ten 3.NBT

\$ense and Censability Lesson 2: Get Set for Goals

Students will identify and develop ways to set short-term and long-term goals for saving, and develop an understanding of the importance of setting savings goals. Activities will help them to understand what might affect decisions to spend or save money, or give it away to a charity. Students will explore how and when to put aside earnings for future purchases, how to set short-term financial goals and become a financially responsible individual.

45 minutes, 25 students maximum, Number & Operations in Base Ten 3.NBT

\$ense and Censability Lesson 3: Make a Plan

Students will gain an understanding of the term "budget" and how to identify categories of a budget including income, expenses, and savings. Students will create a budget, apply budget skills to real world scenarios and be introduced to the concept of "pay yourself first."

45 minutes, 25 students maximum, Number & Operations in Base Ten 3.NBT, 3-3-ETS1-1, 3-5-ETS1-2